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FIG. 1A-1

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1A-1	A-2	T-
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FIG.	FIG.	U
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120

240 840 360 480 99 22 960 giatilcata ococcogagag gategeagga ggeeggeact etgaeteetg gtggatggga etagggagte agagteaage ectgoetgge tgagggeggg egeteegagt eageATGGAA RGICICIGCS GGGICCIGGI AITICIGCIS CIGGCIGCRG GACIGCCGCI CCAGGCGGCC ARGCGGIICC GIGATGIGCI GGGCCAIGAG CAGIAI<u>CCGG AICACAIGAG GGAGAACAAC</u> <u>CARITACGIG GCIGGICIIC AGAIGAA</u>AAI GAAIGGAAIG AACAGCIGIA ICCAGIGIGG AGGAGGGGAG AGGCAGAIG GAAGGACICC IGGGAAGGAG GCCGIGIGCA GGCAGCCCIA ACCAGIOATI CACCOGÇCTI GGIGGGIICC AAIAICACCI ICGIAGIGAA CCIGGIGIIC CCCAGAIGCC AGAAGGAAGA IGCCAACGGC AAIAICGICI AIGAGAGGAA CIGCAGAAGI GRITIGBAGC IGGCIICIGA CCCGIRIGIC IRCARCIGGA CCACAGGGGC AGACGAIGAG GACIGGGARG ACARCACCAG CCARGGCCRG CRCCICAGGI ICCCCGACGG GARGCCCIIC CCICOCCCC RCGGRCGGRA GARAIGGARC IICGICIACG ICIICCRCRC RCIIGGICRG IRIIIICRAR AGCIGGGICA GIGIICAGCR CGAGIIICIA IRARCRCAGI CARCIIGACA GTATGTGATA ACAGATCAGA TCCCTATATT CGTGACCATG IACCAGARGA AIGACCGGAA CICGICIGAI GAARCCTICC ICAGAGACCI CCCCAIIIIC IICGAIGICC ICAIICACGA ICCCAGICAI IICCICAACI ACICIGCCAI IICCIACAAG TSOS PAL UGS HITF UUH LUF PRCQ KED AHG HIUY ERH CRS 8 B D 000 8186 906 898 ОТВСИЅЅОЕНЕИОЕ ОТУРИИ ЯЯСЕ СЯИКОЅ ИЕССЯИО РВРН СЯККИН F V Y V F H T L C Q Y F Q K L C Q C S A R U S I N T U 4 1 1 0 0 1 1 n k 0 Y P O H II R ORAKRFR DUL GKE OLEL AS D PYU YNUT 16A D DE D U E D N T S UIU FRANGRAYIP ISKU KOU GITGGCCCIC AGGICATGGA AGIGATIGIC TITCGAAGAC ACGCCGGGC ATACATICCC ATCICCAAAG IGAAAGACGI PIFFOULLIND ٥ ארכפ חוח צוו וצצפ וגר 3 4 0 0 0 0 0

2160

2/18

2320

2280

galagicalg ocatacaggs colgalicot coectata tagatacit gocalecat gogagaacigo iggocatoio olggocacco gatigilgio iggigigigi gigiaacoloo

gatactcatt aaaaagacog tclattaaoa ooaaaoaaa

თეგმეგენი დაქემები გათეგეგენი გეგეთეგები დეგენი დეგები და გენი გეგის გიმენი დეგი გაქების დეგექიები დადიმიებები დ

1200 1320 1450 1560 1680 1800 1920 2040 IGCCCTICAC CCACACCTIC GCCTICTICI ICGACTICIC CTICGCCTGC ATCTICGCCT TCACCCACAT TATCAACACC TAGICCCTCT TTAATGCCTA CTGGCTACAA ATCCATGGAG CCCACACIOC AGCCIGACAA CICACIGAIG GACIICAIIG IGACCIGCAA AGGGGCCACI CCCACGGARG CCIGIACGAI CAICICIGAC CCCACCIGCC AGAICGCCCA GAACAGGGIG IGGRACITIG GGGRCRACRC IGGCCIGIII GICICCRACA RICRCRCIII GRAICRCRCG IRIGIGCICA RIGGRACCII CARCIIIRAC CICRCCGIGC RARCIGCRGI GCGGGRCCA CIGAGIGACA IIICCAAIGA AARCIGCCGA AIARACAGAI AIGGIIACII CAGAGCCACC AICACAAIIG IAGAIGGAAI CCIAGAAGIC AACAICAICC AGGIAGCAGA IGICCCAAIC ISCRGCCCG ISCCIGIGGA IGACCIGIGC CICCIGICCG IGAGGAGGC CTICARIGGG ICCGGCACGT ACIGIGAA IIICACICIG GGAGACGRIG CAAGCCIGGC CCICACCAGC GOCCTGATCT CTATCCCTGG CAARGACCTA GGCTCCCCTC 1GAGAACAGT GAATGGTGTC CTGATCTCCA TTGGCTGCCT GGCCATGTTT GTCACCATGG TTACCATCTT GCTGTACAAA <u>CCACIGCICC AGGACAAG</u>CC AIGGAIGCIC IAAgtciica cicicaciic igacigggaa cccaciciic igigcaigia igigageigi gcogaagtac algaciggia gcigiigiii ARACACARGA CGIACARGCC ARIAGGARAC IGCACCAGGA ACGIGGICAA GGGCARAGGC CIGAGIGIII IICICAGCCA IGCARAA<u>GCC CCGIICICCC GAGGAGACCG GGAGAAGGA</u>I tclacggalt attgleacat glatotcalg gitlegggeg igtegtlaci iggcatitia gigaegggei gggeegeceg teiticiteg calcigiati giggiilita locigiioal PSS STSP SPR SSP SPIL STP SPS LHPT GYK SHE HCRINRY GYF RATIITU O GILEU HIIQUAO UPI РТСО РОН ЅСИ ОГІИ ТСК СЯТРІЕЯ СТІ ІЅО РІСО ІЯОНЯО ALIS IPG KOLGSPLATUNGULISI GCLANF UTAUTILLYK H F H L I U Q I A U KHKT YKP 16H CTRH UUK GKG LSUF LSH AKA PFSA 60A SCTYCUM Y U L K G T F THE USHHELL HHT CSPU RUD ELC LLSU RRR FNG S D I S N E

3/18 poly A signal is position 111614-111619 translation start (ATG) is: Gene: 83385 cDNA: 92 FIG. 1B 162 152 144 176 157 318 99 99 103 209 94 BAC Stop cDNA Start cDNA Stop Exon Length 162 314 458 634 634 791 1109 1208 1311 1520 1614 2656 315 459 635 792 1110 1209 1312 1521 90839 93594 96665 97300 83455 89986 103142 104515 106702 110141 BAC Start 93419 96509 96983 110048 83294 89834 96906 104413 103044 106494 EXON - 88 -- 160 -2645978627 <del>ب</del> م

FIG. 1C

FIG. 2A-1

FIG. 2A-2

FIG. 2A-3

FIG. 2A-4

FIG. 2A-5

FIG. 2A

rat	ATGGAAAGTC	ATGGAAAGTC TCTGCGGGGT CCTGGTATTT CTGCTGCTGG CTGCAGGACT GCCGCTCCAG GCGGCCAAGC GGTTC	CCTGGTATTT	CTGCTGCTGG	CTGCAGGACT	GCCGCTCCAG	GCGGCCAAGC	GGTTC	75
mouse		ATGGAAAGTC TCTGCGGGGT CCTGGGATTT CTGCTGCTGG CTGCAGGACT GCCTCCCAG GCTGCCAAGC GATTT	CCTGGGATTT	CTGCTGCTGG	CTGCAGGACT	GCCTCTCCAG	GCTGCCAAGC	GATTT	75
human		ATGGAAAGTC TCTACTATTT CCTGGGATTT CTGCTCCTGG CTGCAAGATT GCCACTTGAT GCCCCCAAAC GATTT	CCTGGGATTT	CTGCTCCTGG	CTGCAAGATT	GCCACTTGAT	GCCCCCAAAC	GATTT	75
rat	CGTGATGTGC	CGTGATGTGC TGGGCCATGA GCAGTATCCG GATCACATGA GGGAGAACAA CCAATTACGT GGCTGGTCTT CAGAT	GCAGTATCCG	GATCACATGA	GGGAGAACAA	CCAATTACGT	GCTGGTCTT	CAGAT	15(
mouse	CGTGATGTGC TGGGCCATGA ACAGTATCCC GATCACATGA GAGAGCACAA CCAATTACGT GGCTGGTCTT CGGAT	TGGGCCATGA	ACAGTATCCC	GATCACATGA	GAGAGCACAA	CCAATTACGT	GCCTGGTCTT	CGGAT	15(
human	CATGATGTGC	CATGATGTGC TGGGCAATGA AAGACCTTCT GCTTACATGA GGGAGCACAA TCAATTAAAT GGCTGGTCTT	AAGACCTTCT	GCTTACATGA	GGGAGCACAA	TCAATTAAAT	GCCTGGTCTT	CTGAT	15(
rat	GAAAATGAAT	GAAAATGAAT GGGATGAACA GCTGTATCCA GTGTGGAGGA GGGGAGAGGG CAGATGGAAG GACTCCTGGG AAGGA	GCTGTATCCA	GTGTGGAGGA	GGGGAGAGGG	CAGATGGAAG	GACTCCTGGG	AAGGA	226
mouse	mouse GAAAATGAAT GGGATGAACA CCTGTATCCA GTGTGGAGGA GGGGAGACGG CAGGTGGAAG GACTCCTGGG AAGGA	GGGATGAACA	CCTGTATCCA	GTGTGGAGGA	GGGGAGACGG	CAGGTGGAAG	GACTCCTGGG	AAGGA	229
human		GAAAATGACT GGAATGAAAA ACTCTACCCA GTGTGGAAGC GGGGAGACAT GAGGTGGAAA AACTCCTGGA AGGGA	ACTCTACCCA	GTGTGGAAGC	GGGGAGACAT	GAGGTGGAAA	AACTCCTGGA	AGGGA	22
-			E						,
rat	CCCCTCTCTCC	GGCCGTGTGC AGGCAGCCCT AACCAGTGAT TCACCGGCCT TGGTGGGTTC CAATATCACC TTCGTAGTGA ACCTG	AACCAGTGAT	TCACCGGCCT	TGGTGGGTTC	CAATATCACC	TTCGTAGTGA	ACCTG	ĕ
mouse	mouse GGCCGIGIGC AGGCAGICCI GACCAGIGAC ICACCGGCIC IGGIGGGIIC CAAIAICACI IIIGIGGIGA ACCIG	AGGCAGTCCT	GACCAGTGAC	TCACCGGCTC	TGGTGGGTTC	CAATATCACT	TTTGTGGTGA	ACCTG	30(
human	human GGCCGIGIGC AGGCGGICCI GACCAGIGAC ICACCAGCCC ICGIGGGCIC AAAIAIAACA IIIGGGGTGA ACCIG	AGGCGGTCCT	GACCAGTGAC	TCACCAGCCC	TCGTGGGCTC	AAATATAACA	TTTGCGGTGA	ACCTG	300

rat	GTGTTCCCCA	GATGCCAGAA	GGAAGATGCC	AACGGCAATA	TCGTCTATGA	GAGGAACTGC	GTGTTCCCCA GATGCCAGAA GGAAGATGCC AACGGCAATA TCGTCTATGA GAGGAACTGC AGAAGTGATT TGGAG	375
monse		GTGTTCCCCA GATGCCAGAA	. GGAAGATGCT	AATGGCAATA	AATGGCAATA TCGTCTATGA GAAGAACTGC AGGAATGATT	GAAGAACTGC	AGGAATGATT TGGGA	375
human		GATGCCAAAA	. GGAAGATGCC	AATGGCAACA	ATATTCCCTA GATGCCAAAA GGAAGATGCC AATGGCAACA TAGTCTATGA GAAGAACTGC AGAAATGAGG	GAAGAACTGC	AGAAATGAGG CTGGT	375
rat	CTGGCTTCTG	CIGGCTICIG ACCCGIAIGI	CTACAACTGG	ACCACAGGGG	CAGACGATGA	GGACTGGGAA	CTACAACTGG ACCACAGGGG CAGACGATGA GGACTGGGAA GACAACACCA GCCAA	450
mouse		CTGACATCTG ACCTGCATGT		ACTGCAGGGG	CTACAACTGG ACTGCAGGGG CAGATGATGG TGACTGGGAA GATGGCACCA	TGACTGGGAA	GATGGCACCA GCCGA	450
human		TTATCTGCTG ATCCATATGT		ACAGCATGGT	CAGAGGACAG	TGACGGGGAA		450
rat	GGCCAGCACC	TCAGGTTCCC	CGACGGGAAG	CCCTTCCCTC	GCCCCCACGG	ACGGAAGAAA	GGCCAGCACC TCAGGTTCCC CGACGGGAAG CCCTTCCCTC GCCCCCACGG ACGGAAGAAA TGGAACTTCG TCTAC	505
mouse		TCAGGTTCCC	GGACAGGAGG	CCCTTCCCTC	AGCCAGCATC TCAGGTTCCC GGACAGGAGG CCCTTCCCTC GCCCCCATGG ATGGAAGAAA TGGAGCTTTG	ATGGAAGAAA	TGGAGCTTTG TCTAC	525
human		AGCCATCATA ACGTCTTCCC	TGATGGGAAA	CCTTTTCCTC	TGATGGGAAA CCTTTTCCTC ACCACCCCGG ATGGAGAAGA TGGAATTTCA	ATGGAGAAGA	TGGAATTTCA TCTAC	525
rat	GTCTTCCACA	CACTTGGTCA	GTATTTCAA	AAGCTGGGTC	AGTGTTCAGC	ACGAGTTTCT	GTCTTCCACA CACTIGGTCA GTATTTTCAA AAGCTGGGTC AGTGTTCAGC AGGAGTTTCT ATAAACAAC TOAAC	003
mouse		GTCTTTCACA CACTTGGCCA	GTATTTCCAA	AAACTGGGTC	GTATTICCAA AAACTGGGIC GGIGTICAGC ACGGGITICI ATAAACACAG	ACGGGTTTCT	ATAAACACAG TCAAC	000
human	GTCTTCCACA	GICTICCACA CACTIGGICA		AAATTGGGAC	GTATTICCAG AAATIGGGAC GAIGTICAGI GAGAGITICI GIGAACACAG	GAGAGTTTCT		009
rat	TTGACAGTTG	GCCCTCAGGT	CATGGAAGTG	ATTGTCTTTC	GAAGACACGG	CCGGGCATAC	TIGACAGITG GCCCTCAGGT CATGGAAGIG ATIGICITIC GAAGACACGG CCGGGCATAC ATICCCAICT CCAAA	675
mouse	TTGACAGCTG	TTGACAGCTG GCCCTCAGGT	CATGGAAGTG	ACTGTCTTTC	CATGGAAGTG ACTGTCTTTC GAAGATACGG	CCGGCCATAC ATTCCCATCT	ATTCCCATCT CGAAG	675
numan	GTGACACTTG	GTGACACTTG GGCCTCAACT		ACTGTCTACA	CATGGAAGTG ACTGTCTACA GAAGACATGG ACGGGCATAT GTTCCCATCG	ACGGGCATAT	GTTCCCATCG CACAA	675
				)H	FIG. 2A-2			6

rat	GTGAAAGACG TGTA	<b>TGTGAT</b>	AACAGATCAG	ATCCCTATAT	TCGTGACCAT	GTACCAGAAG	GTGAAAGACG TGTATGTGAT AACAGATCAG ATCCCTATAT TCGTGACCAT GTACCAGAAG AATGACCGGA ACTCG	750
	GTGAAGATG TGTA	TGTGAT	AACAGATCAG	ATCCCTGTAT	TCGTGACCAT	GTCCCAGAAG	GIGAAAGAIG IGTAIGIGAI AACAGAICAG AICCCIGIAI ICGIGACCAI GICCCAGAAG AAIGACAGGA ACIIG	750
human	GIGAAAGAIG IGIACGIGGI AACAGAICAG AIICCIGIGI IIGIGACIAI GIICCAGAAG AACGAICGAA	CGTGGT	AACAGATCAG	ATTCCTGTGT	TTGTGACTAT	GTTCCAGAAG	AACGATCGAA ATTCA	750
	TCTGATGAAA CCTT	CCTCAG	AGACCTCCCC	ATTTTCTTCG	ATGTCCTCAT	TCACGATCCC	TCTGATGAAA CCTTCCTCAG AGACCTCCCC ATTTTCTTCG ATGTCCTCAT TCACGATCCC AGTCATTTCC TCAAC	825
mouse	TCTGATGAGA TCTT	CCTCAG	AGACCTCCCC	ATCGTCTTCG	ATGTCCTCAT	TCATGATCCC	TCTGATGAGA TCTTCCTCAG AGACCTCCCC ATCGTCTTCG ATGTCCTCAT TCATGATCCC AGCCACTTCC TCAAC	825
human	TCCGACGAAA CCTI	CCTCAA	AGATCTCCCC	ATTATGTTTG	ATGTCCTGAT	TCATGATCCT	TCCGACGAAA CCTTCCTCAA AGATCTCCCC ATTATGTTTG ATGTCCTGAT TCATGATCCT AGCCACTTCC TCAAT	825
	TACTCTGCCA TITCCTACAA GIGGAACTIT GGGGACAACA CIGGCCIGIT IGICICCAAC AAICACACTI	CTACAA	GTGGAACTTT	GGGGACAACA	CTGGCCTGTT	TGTCTCCAAC	AATCACACTT TGAAT	006
mouse	GACTCTGCCA TTTCCTACAA GTGGAACTTT GGGGACAACA CTGGCCTGTT TGTCTCCAAC AATCACACTT	CTACAA	GTGGAACTTT	GGGGACAACA	CTGGCCTGTT	TGTCTCCAAC	AATCACACTT TGAAT	006
human	TATTCTACCA TTAACTACAA GTGGAGCTTC GGGGATAATA CTGGCCTGTT TGTTTCCACC AATCATACTG	CTACAA	GTGGAGCTTC	GGGGATAATA	CTGGCCTGTT	TGTTTCCACC	AATCATACTG TGAAT	006
	CACACGTATG TGCI	CAATGG	AACCTTCAAC	TTTAACCTCA	CCGTGCAAAC	TGCAGTGCCG	CACACGTATG TECTCAATGG AACCTTCAAC TTTAACCTCA CCGTGCAAAC TGCAGTGCCG GGACCA	996
mouse	CACACTIATG TGCTCAATGG AACCTTCAAC CTTAACCTCA CCGTGCAAAC TGCAGTGCCC GG	CAATGG	AACCTTCAAC	CTTAACCTCA	CCGTGCAAAC	TGCAGTGCCC	GG	996
human	CACACGIAIG IGCICAAIGG AACCIICAGC CITAACCICA CIGIGAAAGC IGCAGCACCA GGACCIIGIC	CAATGG	AACCTTCAGC	CTTAACCTCA	CTGTGAAAGC	TGCAGCACCA	GGACCTTGTC CGCCA	975
	-TGCC-CC-T CACK	CACACC	TTCGCCTTCT	TCTTCGACTT	CTCCTTC	GCCTGCA	-TGCC-CC-T CACCCACACC TTCGCCTTCT TCTTCGACTT CTCCTTCGCCTGCA TCTTCGCCTT CA	1029
mouse	-16CC-CT	2220	TTCGCCTTCG	ACTCCGCCTT	CACCTTCAAC	TCCCCCCTTA	-TGCC-CTCCCCC TTCGCCTTCG ACTCCGCCTT CACCTTCAAC TCCGCCCTTA CCTTCGCCCT CACCT	1032
_	human CCGCCACCAC CACCCAGACC TTCAAAAA	CAGACC	TTC	8 6 8 8 8 8 8	AA	V		1004

1101	1176	1251	1326	1401
1107	1182	1257	1332	1407
1059	1134	1209	1284	1359
TTTCC TTTCC	S AAGTC S AAGTC S AGGTT	S TGACC S TGACC S TGACC	A GGGTG C GGGTC A CAGTC	T ACTGT T ACTGT T ACTGT
CTGAGTGACA CTGAGTGACA CTGAGTAGGA	GGAATCCTAC GGGATCCTGC GGAATCTTAC	GACTTCATT( GACTTCACT( GACTTTGTC(	GCCCAGAAC! GCCCAGAAC! ACCCAGAAC!	TCCGCCACG TCTGCCACC
TCCATGGAG	AATTGTAGAT	CTCCCTGATG	CTGCCAGATC	CTTCAATGGG
TCCATGGAG	AATTGTAGAG	CTCCCTGATG	CTGCCAGATC	CTTCAATGGG
CCCCTGGAG	AATTGTAGAG	CTCCCTAATA	CTGCGAGATC	CTTCAATGGG
TGGCTACAA A	CACCATCAC P	AGCCTGACAA	CTGACCCCAC	TGAGGAGAGC
TGGTTACAA A	CCACCATCAC P	AGCCTGCCAA	CCGACCCCAC	TGAGAAGAGC
TGGTGACAA C	CCACCATCAC P	GGCCTGAAAG	CTGACCCCAC	TGAGACGAAC
TTAATGCCTA CTGGCTACAA ATCCATGGAG CTGAGTGACA TTTCC	racticagag cracticagag cracticagag cracticaag	CCCACACTGC	ACGATCATCT	CTCCTGTCCG
TTAATGCCTA CTGGTTACAA ATCCATGGAG CTGAGTGACA TTTCC		CCCACACCGC	ACGATCATCT	CTGCTGTCTG
TTAGGACCTG CTGGTGACAA CCCCCTGGAG CTGAGTAGGA TTCCT		CCGGTGCCAT	ACCATCATTT	CTGCTGACTG
CCCACAT TATCAACACC TAGTCCCTCT TTAATGCCTA CTGGCTACAA ATCCATGGAG CTGAGTGACA TTTCC	AATGAAAACT GCCGAATAAA CAGATAAGGT TACTTCAGAG CCACCATCAC AATTGTAGAT GGAATCCTAG AAGTC	AGA TGTCCCAATC CCCACACTGC AGCCTGACAA CTCACTGATG GACTTCATTG TGACC	TGCAAAGGGG CCACTCCCAC GGAAGCCTGT ACGATCATCT CTGACCCCAC CTGCCAGATC GCCCAGAACA GGGTG	TGAGCTGTGC CTCCTGTCCG TGAGGAGGC CTTCAATGGG TCCGGCACGT ACTGT TGGGCTGTGC CTGGCACCT ACTGT TGAGAAGAGC CTTCAATGGG TCTGGCACCT ACTGT TGAGATGTGT CTGGGACGT ACTGT
TTGCCCACAT TATCAACACC TAGCCCCTCT TTAATGCCTA CTGGTTACAA ATCCATGGAG CTGAGTGACA TTTCC	AATGAAAACT GCCGAATAAA CAGATAAGGC TACTTCAGAG CCACCATCAC AATTGTAGAG GGGATCCTGG AAGTC	AGA TGTCCCCATG CCCACACCGC AGCCTGCCAA CTCCCTGATG GACTTCACTG TGACC	TGCAAAGGGG CCACCCCCAT GGAAGCCTGT ACGATCATCT CCGACCCCAC CTGCCAGATC GCCCAGAACC GGGTC	
	GATGAAAACT GCCAGATTAA CAGATAAGGC TACTTTCAAG CCACCATCAC AATTGTAGAG GGAATCTTAG AGGTT	AGA CGTCCTGATG CCGGTGCCAT GGCCTGAAAG CTCCCTAATA GACTTTGTCG TGACC	TGCCAAGGGA GCATTCCCAC GGAGGTCTGT ACCATCATTT CTGACCCCAC CTGCGAGATC ACCCAGAACA CAGTC	
CCCACAT TATCAACACC TAGTCCCTCT TTGCCCACAT TATCAACACC TAGCCCCTCT	AATGAAAACT GCCGAATAAA AATGAAAACT GCCGAATAAA GATGAAAACT GCCAGATTAA	AACATCATCC AGGTAGCAGA AGCATCATGC AGATAGCAGA AACATCATCC AGATGACAGA	CCACTCCCAC CCACCCCCAT GCATTCCCAC	TGGCTGTGGA TGGCTGTGGA TGGATGTGGA
CCCACAT TATCAACACC TAGTCCCTCT TTAATGCCTA CTGGCTACAA ATCCATGGAG CTGAGTGACA TTTCC TTGCCCACAT TATCAACACC TAGCCCCTCT TTAATGCCTA CTGGTTACAA ATCCATGGAG CTGAGTGACA TTTCCCACCCCTTCT TTAGGACCTG CTGGTGACAA CCCCCTGGAG CTGAGTAGGA TTCCT	AATGAAAACT AATGAAAACT GATGAAAACT			TGCAGCCCGG TGGCTGT TGCAGCCCTG TGGCTGT TGCAGCCCTG TGGATGT
rat	rat	rat	rat	rat
mouse	mouse	mouse	mouse	mouse
human	human	human	human	human

FIG. 2A-4

rat	GTGAATTICA CTCTGGGAGA CGATGCAAGC CTGGCCCTCA CCAGCGCCCT GATCTCTATC CCTGGCAAAG ACCTA 1476
mouse	GTGAATTICA CTCTGGGAGA TGATGCAAGC CTGGCCCTCA CCAGCACCCT GATCTCTATC CCTGGCAAAG ACCCA 1482
human	GTGAACCTCA CCCTGGGGGA TGACACAAGC CTGGCTCTCA CGAGCACCCT GATTTCTGTT CCTGACAGAG ACCCA 1434
rat	GECTCCCCTC TGAGAACAGT GAATGGTGTC CTGATCTCCA TTGGCTGCCT GGCCATGTTT GTCACCATGG TTACC 1551
mouse	GACTCCCCTC TGAGAGCAGT GAATGGTGTC CTGATCTCCA TCGGCTGCCT GGCTGTGCTT GTCACCATGG TTACC 1557
human	GCCTCGCCTT TAAGGATGGC AAACAGTGCC CTGATCTCCG TTGGCTGCTT GGCCATATTT GTCACTGTGA TCTCC 1509
rat	ATCTTGCTGT ACAAAAACA CAAGACGTAC AAGCCAATAG GAAACTGCAC CAGGAACGTG GTCAAGGGCA AAGGC 1626
mouse	ATCTTGCTGT ACAAAAAACA CAAGGCGTAC AAGCCAATAG GAAACTGCCC CAGGAACACG GTCAAGGGCA AGGC 1632
human	CTCTTGGTGT ACAAAAACA CAAGGAATAC AACCCAATAG AAAATAGTCC TGGGAATGTG GTCAGAAGCA AAGGC 1584
rat	CTGAGTGTTT TTCTCAGCCA TGCAAAAGCC CCGTTCTCCC GAGGAGACCG GGAGAAGGAT CCACTGCTCC AGGAC 1701
mouse	CTGAGTGTTC TCCTCAGTCA CGCGAAAGCC CCGTTCTTCC GAGGAGCCA GGAGAAGGAT CCATTGCTCC AGGAC 1707
human	CTGAGTGTCT TTCTCAACCG TGCAAAAGCC GTGTTCTTCC CGGGAAACCA GGAAAAGGAT CCGCTACTCAA 1655
rat	AAGCCATGGA TGCTCTAA 1719
mouse	AAGCCAAGGA CACTCTAA 1725
human	AAACCAAGAATTTAAAG GAGTTTCTTA A 1683
	FIG. 2A-5

FIG. 2B-1	FIG. 2B-2	FIG. 2B	10	)/18		
50	50	<i>,</i> —	150 150 150	200 200 200	250 250 250	300
NNQLRGWSSD HNQLRGWSSD	HNQLNGWSSD GSNITFVVNL	GSNI T FVVNL GSNI T FAVNL	DEDWEDNTSQ DGDWEDGTSR DSDGENGTGQ	SARVSINTVN SARVSINTVN SVRVSVNTAN	TMYQKNDRNS TMSQKNDRNL TMFQKNDRNS	LEVSNNHTLN LEVSNNHTLN LEVSTNHTVN
HEQY PDHMRE HEQY PDHMRE	NERPSAYMRE ALTSDSPALV	VLTSDSPALV VLTSDSPALV	YVYNWTTGAD HVYNWTAGAD YVYNWTAWSE	GQYFQKLGQC GQYFQKLGRC GQYFQKLGRC	VITDQIPIEV VITDQIPVEV VVTDQIPVEV	YKWNEGDNTG YKWNEGDNTG YKWSFGDNTG
AAKRFRDVLG AAKRFRDVLG	AAKRFHDVLG DSWEGGRVQA	DSWEGGRVQA NSWKGGRVQA	RSDLELASDP RNDLGLTSDL RNEAGLSADP	WNEVYVEHTL WSEVYVEHTL WNEIYVEHTL	IPISKVKDVY IPISKVKDVY VPIAQVKDVY	SHFLNYSAIS SHFLNDSAIS SHFLNYSTIN
LLLAAGLPLQ LLLAAGLPLQ	LLLAARLPLD VWRRGEGRWK	VWRRGDGRWK VWKRGDMRWK	NGNIVYERNC NGNIVYEKNC NGNIVYEKNC	PFPRPHGRKK PFPRPHGWKK PFPHHPGWRR	IVFRRHGRAY TVFRRYGRAY TVYRRHGRAY	IFFDVLIHDP IVFDVLIHDP IMFDVLIHDP
MESLCGVLVF LLLAAGLPLQ MESLCGVLGF LLLAAGLPLQ	MECLYYFLGF ENEWDEQLYP	ENEWDEHLYP ENDWNEKLYP	VEPRCQKEDA NGNIVYERNC VEPRCQKEDA NGNIVYEKNC IFPRCQKEDA NGNIVYEKNC	GQHLRFPDGK SQHLRFPDRR SHHNVFPDGK	LTVGPQVMEV LTAGPQVMEV VTLGPQLMEV	SDETFLRDLP SDEIFLRDLP SDETFLKDLP
rat mouse	human rat	mouse	rat mouse human	rat mouse human	rat mouse human	rat mouse human

FIG. 2B-1

		C_BC_CB_C	PWML 572 PRTL 574 EFKGVS 560	REKDPLLQDK QEKDPLLQDK QEKDPLLKNQ	HAKAPFSRGD HAKAPFFRGD RAKAVFFPGN	rat mouse human
534	RSKGLSVFLN	PIENSPGNVV		LAIFVTVISL	ANSALISVGC	human
548 550	KGKGLSVFLS KGKGLSVLLS	PIGNCTRNVV PIGNCPRNTV	LLYKKHKTYK LLYKKHKAYK	LAMFVTMVTI LAVLVTMVTI	VNGVLISIGC VNGVLISIGC	rat mouse
484	DRDPASPLRM	ALTSTLISVP	NLTLGDDTSL	TFNGSGTYCV	DEMCLLTVRR	human
200	GKDPDSPLRA	ALTSTLISIP	NFTLGDDASL	AFNGSGTYCV	DGLCLLSVRR	mouse
498	GKDLGSPLRT	ALTSALISIP	NFTLGDDASL	AFNGSGTYCV	DELCLLSVRR	rat
434	QNTVCSPVDV	IISDPTCEIT	QGSIPTEVCT	SSLIDEVVTC	DVLMPVPWPE	human
450	QNRVCSPVAV	IISDPTCQIA	KGATPMEACT	Z	DVPMPTPQPA	
448	QNRVCSPVAV	IISDPTCQIA	KGATPTEACT	NSLMDFIVTC	DVPIPTLQPD	rat
384	ILEVNIIQMT	FQATITIVEG	ENCQINRYGH	NPLELSRIPD	PTPSLGPAGD	human
	ILEVSIMQIA	FRATITIVEG	ENCRINRYGY	KSMELSDISN	PSPSLMPTGY	mouse
3 8 8 8	ILEVNIIQVA	FRATITIVDG	ENCRINRÝGY	KSMELSDISN	PSPSLMPTGY	rat
334	SK	PPRP	GPCPPPPP	LNLTVKAAAP	HTYVLNGTFS	human
S	SPSPLPTLST	PPSPSTPPLP	GPCPPPSPST	LNLTVQTAVP		mouse
348	ASSPSPTLST	-PSSSTSPSP	GPCPSPTPS-	FNLTVQTAVP	HTYVLNGTFN	rat

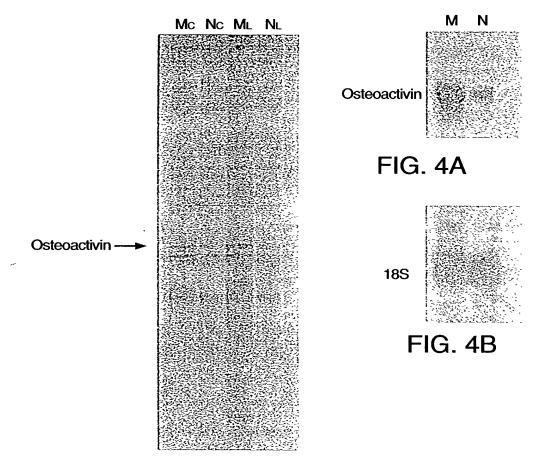


FIG. 3

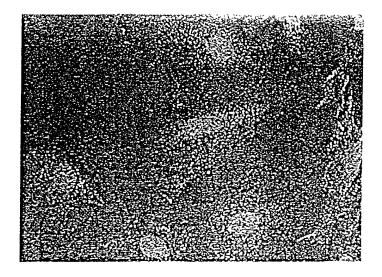


FIG. 5

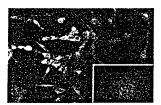


FIG. 5A

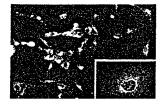


FIG. 5B



FIG. 5C

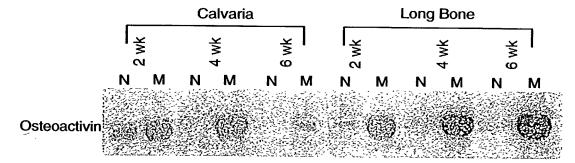
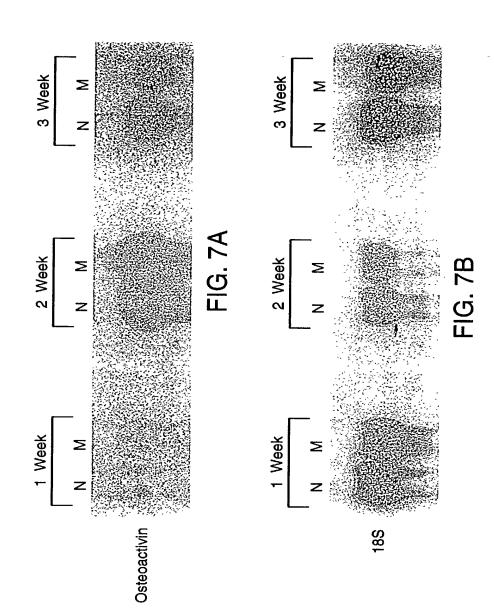


FIG. 6

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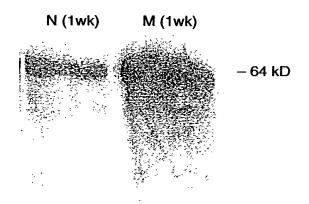
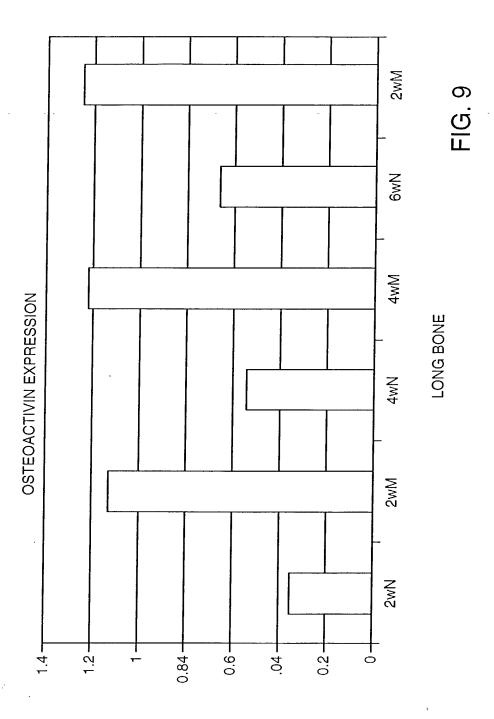


FIG. 8





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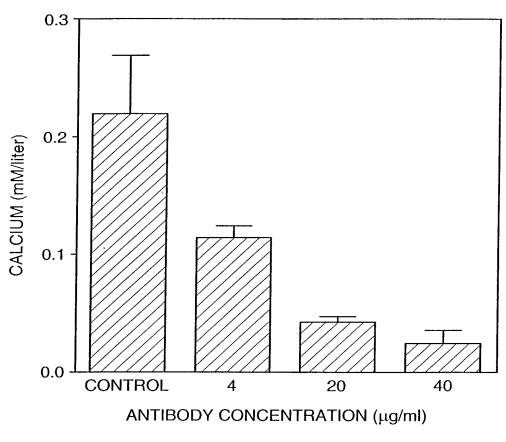


FIG. 10